

# FLAMCO COMBINED AIR & DIRT, AND HYDRAULIC SEPARATORS

## Get rid of air and dirt

Air and dirt in a system causes problems such as reduced heat transfer, unnecessary faults and wear and noise. But also lead to disruptions of the system and reduced pump performance. Higher energy consumption and an unreliable system are the consequence.

### Where do air and dirt come from?

Air particles and gases are always present in the water of heating and cooling systems. They are generally a consequence of activities performed (maintenance, draining and filling etc.), micro-leaks, diffusion and chemical processes in the water.

Dirt is caused by corrosion processes, maintenance to the system or failing system parts. It can accumulate and cause blockages. The use of filters is not ideal because these do not trap smaller particles, silt up, cause high flow resistance, need regular maintenance and require replacement of components.



### Air and dirt in a system lead to:

- Shortened system-life due to corrosion.
- Reduced comfort due to less heat transfer and noises.
- Cavitation and magnetite damage pumps.
- Disruptions of the system.
- Loss of image for installers and component suppliers.

With air and dirt separators these adverse factors are reduced as much as possible.

**Flamcovent Clean Smart**

## The new standard

### Flamco has the answer

The new Flamcovent, Flamco Clean and Flamcovent Clean Smart air and dirt separator range removes even the smallest microbubbles and minuscule dirt particles from the system water. They are close to maintenance-free and the flow resistance is negligibly low, which saves energy.

### The new and proven standard

The Smart air and dirt separators are smart products in every aspect. And just as in other innovations from Flamco, their new technology delivers optimal performance.

Just like the Smart range with connection sizes up to 2", the proven effectiveness makes them future ready and the new standard in air and dirt separation.



Flamcovent Smart

Flamco Clean Smart

### Main advantages

- Up to 60% better performance compared to conventional air and dirt separators.
- Extremely low flow resistance resulting in the best energy conservation possible.
- Standard flow velocities up to 3 m/s.
- Consistent performance throughout its service life.
- Low maintenance.

**Sizes 50mm – 600mm**  
**Cleans down to 0.4 micron**

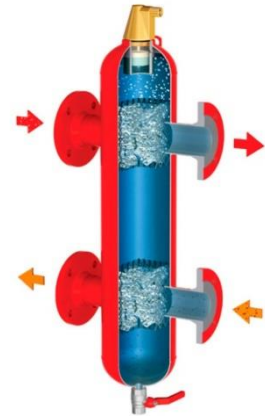
# Flamco Flexbalance Plus

## Combined Air, Dirt & Hydraulic Separators

Increasingly, central heating installations are fitted with several boilers. This means that, depending on the need for heat, an ancillary boiler can be switched on or off.

Additionally, there are often several sub-circuits, each fitted with its own pump.

Because of the continuous fluctuation in the heating demand and supply, there is a great chance of such systems suffering hydraulic imbalance, which leads to bad heat output, the pumps being overloaded, and a system which is difficult to regulate. By using a FlexBalance Plus or FlexBalance hydraulic separator, this problem can be avoided. The output of the installation is clearly improved by this.



### FLEXBALANCE ADVANTAGES

- ✓ For use in heating and cooling systems.
- ✓ Integrated air separation.
- ✓ Hydraulic separation between primary and secondary circuits.
- ✓ The use of a perforated sheet promotes the balancing functions of the FlexBalance.
- ✓ Use with several boilers – whether or not in a cascade design
- ✓ proves no problem in the system
- ✓ The control system is not influenced by other circuits.

Wide model range, with welding, flange and threaded connections.

**Sizes 50mm – 600mm**

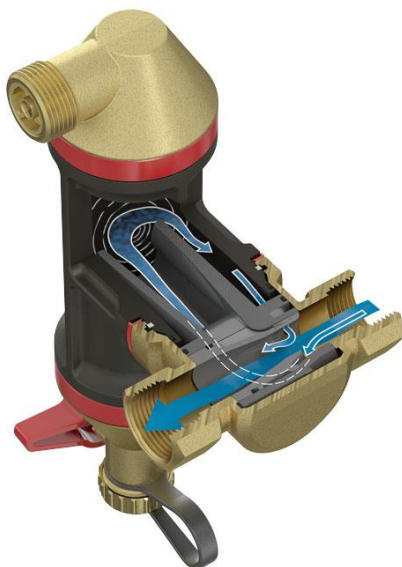
## Flamcovent Clean Smart ECO Plus



Four neodymium supermagnets are incorporated into the logo. The magnetic rating per magnet is 5,855 Gauss.

The logo/magnet holder is situated right opposite the outflow opening, through which all ferrous particles are directly attracted and held. Even particles as small as 4 µm are removed.

Sizes ¾" Up to 2"  
Light Commercial Range



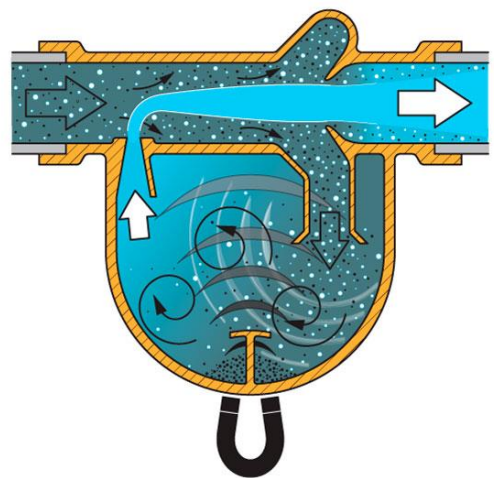
Compacter, lighter, cleaner and even more efficient

The Flamco Clean Smart EcoPlus dirt separators are smart products in every aspect. And just as in other innovations from Flamco, their groundbreaking new design also delivers optimal performance. These dirt separators for heating and cooling systems are the new standard.

The Flamco Clean Smart dirt separators remove even minuscule dirt particles from the system water. They are near enough maintenance-free and the flow resistance is negligibly low.

### Advantages

- ✓ 60% better performance compared to conventional separators.
- ✓ Suitable for temperatures of up to 120 °C.
- ✓ Suitable for operating pressures of up to maximum 10 bar.
- ✓ Unique flow velocities, up to 3 m/s.
- ✓ Can be used with all kinds of pipework.
- ✓ Compact dimensions, light weight.
- ✓ Available in various sizes up to 2".
- ✓ Extremely low flow resistance and low loss of energy.
- ✓ Consistent performance throughout its service life.
- ✓ The EPP insulation material has a thickness of 20 mm and an insulation value of (λ) of 0.036 W/mK.



For operation Animation, please click here: